What is claimed is:

1. A monodirectional impeller for centrifugal electric pumps having a permanent-magnet synchronous motor, wherein its vanes are deformable at least along part of their extension and can change their curvature, when loaded, in one direction of rotation, so that the power required for rotation in that direction is greater than the maximum power that can be delivered by the motor.

2. The impeller according to claim 1, wherein said vanes are nondeformable adjacent to the rotation axis and are elastically deformable in their peripheral region.

3. The impeller according to claim 1, comprising a plastic ring from which a plurality of vanes protrudes monolithically outward, said ring being accommodated in a corresponding seat of a disk which ends perimetrically on the outside of each one of said vanes.

4. The impeller according to claim 1, comprising a plastic disk from which a plurality of vanes having a curved profile protrudes monolithically, the peripheral regions of said vanes being separated from said disk and being flexibly deformable.

5. The impeller according to claim 1, comprising retention teeth which are alternated with said vanes and act as retention elements to avoid excessive curvatures of said vanes in a wrong direction of rotation.

6. The impeller according to claim 5, wherein in order to center said vanes with respect to said retention teeth, said ring has axial teeth to be inserted in suitable holes of said disk.

7. The impeller according to claim 1, wherein said vanes are enclosed between two disk-like elements.

8. The impeller according to claim 3, wherein said vanes are rigidly coupled to said disk or ring by interlocking and/or interference, ultrasonic welding, adhesive bonding, or equivalent methods.

9. The impeller according to claim 1, comprising a driving device which is constituted by a substantially cylindrical closed enclosure which is rigidly coupled to said impeller and from an inner wall of which a tooth protrudes, said tooth being rigidly coupled to the impeller assembly and interacting with a tooth which protrudes from a ring which is rotatable about a shank which is rigidly coupled to a rotor shaft, a tooth protruding radially from said shank and interacting, in its rotation, with the tooth of the ring, whose axial protrusion is such as to affect the path of the rotation of both teeth, said teeth being arranged axially so as to not interfere with each other.

10. The impeller according to claim 9, wherein said enclosure is constituted by a hollow body and by a cover which is closed hermetically.

11. The impeller according to claim 10, wherein an hermetic seal of said driving device is ensured by a gasket for said shaft and by the closure of said cover by ultrasonic welding, adhesive bonding, a gasket or equivalent methods.

12. The impeller according to claim 10, wherein grease having a shock absorbing function is arranged inside said hollow body.

13. The impeller according to claim 1, wherein it has, at an end thereof, a seat for a first shim ring made of hard material, a second shim ring made of hard material being accommodated in a seat which is provided at one end on a cylindrical support which is supported by a bush which is rigidly coupled, by means of connecting spokes, to a ring which is accommodated in a corresponding seat of a volute of the impeller.

14. The impeller according to claim 13, wherein said support is monolithic with said bush.